Application No. Applicant(s) 10/764,777 SPEYER, CHRIS Notice of Allowability Examiner Art Unit Michael Trinh 2822 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to <u>Amendment filed January 13, 2006</u>. 2. The allowed claim(s) is/are 1,3-7,9-16,20-26,28-35,39-45 and 47-55. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2.
☐ Certified copies of the priority documents have been received in Application No. 3.
Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) I including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date _ (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application (PTO-152) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 6. Interview Summary (PTO-413), Paper No./Mail Date 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08), 7. Examiner's Amendment/Comment Paper No./Mail Date 4.

Examiner's Comment Regarding Requirement for Deposit 8.

Examiner's Statement of Reasons for Allowance of Biological Material 9. Other ____.

Michael Trinh
Primary Examiner

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DETAILED ACTION

*** This office action is in response to Applicant's Amendment filed January 13, 2006. Claims 1,3-7,9-16,20-26,28-35,39-45,47-55 are pending. Claims 2,8,17-19,27,36-38,46,56-93 were canceled.

Allowable Subject Matter

- 1. Claims 1,3-7,9-16,20-26,28-35,39-45,47-55 are allowed.
- 2. The following is a statement of reasons for the indication of allowable subject matter:

Applicant's amendment and convincing remarks filed January 13, 2006 have overcome the rejections of record, in which the references of record including Harame et al (4,997,776), Zdebel (5,070,031), etc., alone or in combination, do not fairly anticipatively disclose each and every aspect of the claimed method, or fairly make a prima facie obvious case of the claimed method, in combination with other processing claimed limitations as recited in base claims, such as in claim 1, the inclusion of forming a first layer of epitaxial silicon having a thickness of approximately 15-30 microns above a surface of a semiconducting substrate; forming a second layer of epitaxial silicon having a thickness of approximately 0.5-2.0 microns on the first layer of epitaxial silicon; forming a third layer of epitaxial silicon having a thickness of approximately 20-25 microns on the second layer of epitaxial silicon, wherein the semiconducting substrate is doped with a dopant material of a first type and the second and third layers of epitaxial silicon are doped with a dopant material that is of a type opposite to that of said first type of dopant material, and wherein the first, second and third layers of epitaxial silicon are formed by performing an in situ epitaxial growth process in a single epitaxial reactor; forming a trench isolation region that extends through at least the third layer of epitaxial silicon; and forming a portion of a semiconductor device above said third layer of epitaxial silicon within an area defined by the isolation region.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael M. Trinh whose telephone number is (571) 272-1847. The examiner can normally be reached on M-F: 9:00 Am to 5:30 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on (571) 272-2429. The central fax phone number is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Oacs-4

Michael Trinh Primary Examiner